

Atty. Dkt. No. 037768-0109
Appl. No. 10/724,158
Reply to Office action of 04-20-2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for coloring a composition of matter comprising:
preparing a color nanopigment comprising two or more metals,
wherein the color nanopigment exhibits at least 10% more transparency than coarse color pigment of substantially same composition with at least 1 micrometer mean particle size;
wherein the transparency is measured at a wavelength between 300 nanometers and 800 nanometers; and
combining the color nanopigment and the composition of matter; and
wherein the nanopigment is multifunctional and provides color while simultaneously enhancing non-optical performance of the composition of matter.
2. (Original) The method of claim 1, wherein the composition of matter comprises plastic.
3. (Original) The method of claim 1, wherein the composition of matter comprises ceramic.
4. (Original) The method of claim 1, wherein the composition of matter comprises cement.
5. (Original) The method of claim 1, wherein the composition of matter comprises glass.
6. (Original) The method of claim 1, wherein the composition of matter comprises wood.

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7. (Original) The method of claim 1, wherein the composition of matter comprises fibers.
8. (Original) The method of claim 1, wherein the composition of matter comprises paint.
9. (Original) The method of claim 1, wherein the composition of matter comprises ink.
10. (Original) The method of claim 1, wherein the color nanopigment comprises at least one oxide.
11. (Original) The method of claim 1, wherein the color nanopigment comprises at least one nitride.
12. (Original) The method of claim 1, wherein the color nanopigment comprises at least one element with atomic number greater than 21.
13. (Original) The method of claim 1, wherein the color nanopigment comprises at least one organic compound.
14. (Original) The method of claim 1, further comprising heating the color nanopigment before combining the color nanopigment and the composition of matter.
15. (Original) The method of claim 1, wherein the combining comprises coating the composition of matter.
16. (Original) The method of claim 1, wherein the combining comprises bonding the color nanopigment and composition of matter.
17. (Original) The method of claim 1, wherein the combining comprises impregnating the composition of matter with the color nanopigment.
18. (Original) The method of claim 1, wherein the combining comprises mixing the color nanopigment and composition of matter.

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19. (Original) The method of claim 1, wherein the color nanopigment has an average packing number less than 1000.
20. (Original) The method of claim 1, wherein the color nanopigment comprises at least one inorganic compound.
21. (New) The method of claim 1, wherein the non-optical performance is selected from the group consisting of enhanced modulus, hardness and toughness.
22. (New) The method of claim 1, wherein the non-optical performance is selected from the group consisting of thermal insulation, corrosion resistance, fire resistance and anti-microbial activity.